

MR929-959
Appln. No. 10/774,514
Reply to Office Action dated 3/9/2005

AMENDMENTS TO THE CLAIMS

This Listing of Claims will replace all prior versions, listing, of claims in the specification.

LISTING OF CLAIMS:

Claim 1 (original) A method for bonding flat glasses comprising the steps of:

obtaining flat glasses having bonding surfaces with a surface precision degree less than $1/2\lambda(\lambda=632.8\text{nm.})$;

cleaning the bonding surfaces of the flat glasses;

placing the flat glasses in a clamp;

tightening the clamp until the flat glasses are combined with each other to achieve an optical lens assembly; and

separating the optical lens assembly from the clamp.

Claim 2 (original) The method for bonding flat glasses as claimed in Claim 1, wherein the cleaning step uses an ultrasonic solution to clean the flat glasses, and then uses a volatile solvent to clean and dry the flat glasses.

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Claim 3 (original) The method for bonding flat glasses as claimed in Claim 1 further comprising a step of examining the flat glasses with an interferometer to check whether contaminants left on the bonding surfaces after the cleaning step.

Claim 4 (original) The method for bonding flat glasses as claimed in claim 1 further comprising a step of heating the clamp to decrease time for combining the flat glasses when the clamp is tightened.

Claim 5 (original) The method for bonding flat glasses as claimed in Claim 3 further comprising a step of blowing dust off the bonding surfaces with an airbrush after the step of examining the flat glasses.

Claim 6 (original) the method for bonding flat glasses as claimed in Claim 4, wherein the clamp is preferably heated to a temperature between 100°C and 250°C.

Claim 7 (original) A method for bonding flat glasses comprising the steps of:

obtaining flat glasses having bonding surfaces with surface precision degree less than $1/2\lambda(\lambda=632.8\text{nm})$;

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cleaning the bonding surfaces of the flat glasses in an ultrasonic solution and a volatile solvent;

examining the flat glasses with an interferometer to check surface precision of the flat glasses and to ensure that no contaminant is on the bonding surfaces;

placing the flat glasses in a clamp;

tightening the clamp until the flat glasses are combined with each other to achieve an optical lens assembly; and

separating the optical lens assembly from the clamp.

Claim 8 (original) The method for bonding flat glasses as claimed in Claim 7 further comprising a step of heating the clamp to accelerate combination of the flat glasses after the act of tightening the clamp.

Claim 9 (original) The method for bonding flat glasses as claimed in Claim 7 further comprising a step of removing dust from the bonding surfaces with an airbrush after the act of examining the flat glasses.

Claim 10 (original) The method for bonding flat glasses as claimed in Claim 8, wherein the clamp is preferably heated to a temperature between 100°C and 250°C.

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Claim 11 (original) A method for bonding flat glasses comprising the steps of:

obtaining flat glasses having bonding surfaces with surface precision degree less than $1/2\lambda$;

cleaning the bonding surfaces of the flat glasses in an ultrasonic solution and a volatile solvent;

examining the flat glasses with an interferometer to check surface precision of the flat glasses and ensure no contaminant is on the bonding surfaces;

placing the flat glasses in a clamp;

tightening the clamp until the flat glasses are combined with each other to achieve an optical lens assembly;

heating the clamp to a temperature between 100°C and 250°C to decrease time for combining the flat glasses; and

separating the optical lens assembly from the clamping apparatus.

Claim 12 (original) The method for bonding flat glasses as claimed in Claim 11 further comprising a step of removing dust from the bonding surfaces with an airbrush after the step of examining the flat glasses.

Claim 13 (canceled).